Amendments to the claims:

The following list of claims replaces all prior versions, and listings, of claims in the application:

Listing of claims:

1. (withdrawn) A compound of the formula $ROC_6H_4SO_2NMSO_2R_f$ where R is a C_1-C_5 alkyl, R_f is a C_1-C_8 perfluoroalkyl, Li, Na, H, and K, and M is selected from the group consisting of H, Li, K, Na, R'_3NH+, or mixtures thereof, where R' is a C_1-C_5 alkyl.

2. (Withdrawn) A compound of the formula $ROC_6H_4SO_2NR^1SO_2R_f$ where R is a C_1-C_5 alkyl and R^1 is selected from the group consisting of Li, H, K and Na, and R_f is a C_1-C_8 perfluoroalkyl.

3. (Withdrawn) A sulfonimide bearing compound of the formula $HOC_6H_4SO_2NR^1SO_2R_f$ where R^1 is selected from the group consisting of Li, K, H, and Na, and R_f is a C_1-C_8 perfluoroalkyl comprising,

reacting $ROC_6H_4SO_2Cl$ where R is a C_1-C_5 alkyl with $R_fSO_2NH_2$ where R_f is any C_1-C_8 perfluoroalkyl, and a base selected from the group consisting of Trimethylamine, Triethylamine, Pyridine, Imidazole, Pyrimidine or mixtures thereof in the presence of a first solvent selected from the group consisting of Acetone, Acetonitrile, N,N-dimethylacetamide, N,N-dimethylformamide, Dimethyl sulfoxide, Hexamethylphosphoramide, Nitromethane, Pyridine, Tetrahydrofuran or mixtures thereof to produce a first intermediate compound of the formula $ROC_6H_4SO_2NMSO_2R_f$ where M is R'_3NH^+, where R' is a C_1-C_5 alkyl.

reacting the first intermediate compound with an alkali metal salt selected from the group consisting of Lithium methoxide, Lithium ethoxide, Lithium tert-butoxide, Lithium phenolate, Lithium hydroxide, Sodium methoxide, Sodium ethoxide, Sodium tert-butoxide, Sodium phenolate, Sodium hydroxide Potassium

methoxide, Potassium ethoxide, Potassium phenolate, Potassium tert-butoxide, Potassium hydroxide or mixtures thereof in the presence of a second solvent selected from the group consisting of Methanol, Ethanol, Isopropanol, tert-Butanol, Acetone, Acetonitrile, N,N-dimethylacetamide, N,N-dimethylformamide, Dimethyl sulfoxide, Hexamethylphosphoramide, Nitromethane, Tetrahydrofuran or mixtures thereof to produce a second intermediate of the formula $ROC_6H_4SO_2NMSO_2R_f$ where M is selected from the group consisting of Li, Na and K, R_f is a C_1-C_8 perfluoroalkyl, and R is a C_1-C_5 alkyl,

reacting the second intermediate with an alkali alkane thiolate selected from the group consisting of sodium ethane thiolate, lithium ethane thiolate, potassium ethane thiolate and mixtures thereof to produce a sulfonimide bearing compound of the formula $HOC_6H_4SO_2NMSO_2R_f$, where M is selected from the group consisting of Li, Na, H and K, and R_f is a C_1-C_8 perfluoroalkyl.

4. (Withdrawn) An alkali sulfonimide bearing compound of the formula $ROC_6H_4SO_2NR^1SO_2R_f$ where R and R^1 are the same or different and each of R and R^1 are selected from the group consisting of Li, Na, H, and K, and R_f is a C_1-C_8 perfluoroalkyl.

5. (Withdrawn) The alkali sulfonimide bearing compound of claim 4 wherein R and R^1 each are Na.

6. (withdrawn)An amine terminated sulfonimide bearing compound of the formula $H_2NC_6H_4SO_2NR^1SO_2R_f$ where R^1 is selected from the group consisting of Li, Na, H, and K, and , R_f is a C_1-C_8 perfluoroalkyl.

7. (Withdrawn] The amine terminated sulfonimide bearing compound of claim 7 where R^1 is Na.

8. (Withdrawn) A method of making an alkali phenoxy sulfonimide functionalized polyphosphazene comprising,

reacting a polyphosphazene of the formula $(NPCl_2)_n$, where $n \geq 3$ with an alkali oxide derivative selected from the group consisting of sodium p-methyl phenoxide, lithium p-methyl phenoxide, potassium p-methyl phenoxide to produce a first intermediate of the formula $[(NP(Cl)_x(OC_6H_4)_{2-x}]_n$, where $n \geq 3$,

reacting the first intermediate with a second alkali salt $R^1OC_6H_4SO_2NR^1SO_2R_f$, where R^1 is Li, K, or Na, and where, R_f is a C_1-C_8 perfluoroalkyl, to produce a second intermediate of the formula such as $[NP(OC_6H_4SO_2NR^1SO_2R_f)_x(OC_6H_4CH_3)y(Cl)_{2-x-y}]n$, where R^1 is Li, Na, or K, and where R_f is a C_1-C_8 perfluoroalkyl.

reacting the second intermediate with a third alkali salt selected from the group consisting of $H_3CC_6H_4ONa$, $NaOC_6H_5$, $NaOC_6H_4CF_3$, $LiOC_6H_4CH_3$, $LiOC_6H_5$, $LiOC_6H_4CF_3$, $H_3CC_6H_4OK$, KOC_6H_5 and $KOC_6H_4CF_3$ to produce an alkali phenoxy sulfonimide functionalzied polyphosphazene of the formula such as $[NP(OC_6H_4SO_2NR^1SO_2R_f)_x(OC_6H_4CH_3)_{2-x}]n$, where , R_f is a C_1-C_8 perfluoroalkyl, and where R^1 is Li, K or Na,.

Claims 9-35. (Canceled)

36(withdrawn). The method of claim 8 wherein R^1 is Na.

37(withdrawn). A method of making a phenoxy sulfonimide functionalized polyphosphazene comprising,

reacting polyphosphazene of the formula $(NPCl_2)_n$, where $n \geq 3$ with $R^1OC_6H_4CH_3$ and $R^1OC_6H_4SO_2NR^1SO_2R_f$ where R^1 is selected from the group consisting of Na, K and Li and , R_f is a C_1-C_8 perfluoroalkyl, to produce a reaction product, and

reacting the reaction product with $R^1OC_6H_4CH_3$ where R^1 is selected from the group consisting of Na, K, H and Li to produce an alkali phenoxy sulfonimide functionalized polyphosphazene of the formula $[NP(OC_6H_4SO_2NR^1SO_2R_f)_x(OC_6H_4CH_3)_{2-x}]_n$.

38(withdrawn). The method of claim 37 wherein R^1 is Na.

39(withdrawn). A sulfonimide functionalzied polyphosphazene homopolymer of the formula $[NP(OC_6H_4SO_2NR^2SO_2R_f)_2]_n$ where R^1 is selected from the group consisting of Li, Na, H and K.

40(withdrawn). The homopolymer of claim 39 wherein $R^1$is Na.

41(withdrawn). A method of manufacture of a sulfonmide functionalzied polyphosphazene homopolymer of the formula $[NP(OC_6H_4SO_2NR^1SO_2R_f)_2]_n$ where R^1 is selected from the group consisting of Li, Na, H, and K and , R_f is a C_1-C_8 perfluoroalkyl, comprising,

reacting $(NPCl_2)_n$, where $n \geq 3$ with $R^1OC_6H_4NR^1SO_2R_f$ where R^1 is selected from the group consisting of Li, K and Na and , R_f is a C_1-C_8 perfluoroalkyl, at a temperature of about 60 °C to about 200 °C at a pressure of about ambient to about 12 bar for about 12 hours to about 40 hours.

42. (withdrawn) The method of claim 41 wherein R^1 is Na.

43(amended). A phenoxy sulfonimide functionalized polyphosphazene copolymer of the formula $[NP(ZR^2)_x(ZC_6H_4SO_2NR^1SO_2R_f)_{2-X}]_n$, where <u>n is greater than or equal to 3 and wherein X is from 0 to 2 such that X + (2-X) = 2</u>, R_f is a C_1-C_8 perfluoroalkyl, where R^2 is selected from the group consisting of $-CH_2CH_3$, $-C_6H_4CH_3$, $-CH_2CH_2OCH_2CH_2OCH_3$, $-CH_2CH_2OTHP$, $-C_6H_4COOPr$, $-CH_2CF_3$, $-CH_2CF_2OCF_2CF_2OCF_3$, $-C_6H_4CF_3$, $-C_6F_5$, and mixtures thereof, Z is O or NH, and R^1 is selected from the group consisting of Na, Li, H, and K where THP is

tetrahydropyranyl.

44(original). The copolymer of claim 43 wherein R^2 is $-C_6H_4CH_3$, and Z is –O-.

45(original). The copolymer of claim 43 wherein R^1 is Na.

46(amended). A method of making a phenoxy sulfonimide functionalized polyphosphazene copolymer of the formula $[NP(ZR^2)_x(ZC_6H_4SO_2NR^1SO_2R_f)_{2-X}]_n$, where n is greater than or equal to 3 and wherein X is from 0 to 2 such that X + (2-X) = 2, R_f is a C_1-C_8 perfluoroalkyl, where R^2 is selected from the group consisting of -CH_2CH_3, -$C_6H_4CH_3$, -$CH_2CH_2OCH_2CH_2OCH_3$, –CH_2CH_2OTHP where THP is tetrahydropyranl, -C_6H_4COOPr, -CH_2CF_3, -$CH_2CF_2OCF_2CF_2OCF_3$, -$C_6H_4CF_3$, -C_6F_5, Z is O or NH, and R^1 is selected from the group consisting of Na, Li and K, comprising,

reacting $(PNCl_2)_n$, where $n \geq 3$ with a first amount of compound of the formula R^3R^2 where R^3 is selected from the group consisting of –NaO, -LiO, -KO, NH_2 or mixtures thereof, R^2 is selected from the group consisting of -CH_2CH_3, -$C_6H_4CH_3$, -$CH_2CH_2OCH_2CH_2OCH_3$,–CH_2CH_2OTHP where THP is tetrahydropyranyl, -C_6H_4COOPr, -CH_2CF_3, -$CH_2CF_2OCF_2CF_2OCF_3$, -$C_6H_4CF_3$, -C_6F_5, or mixtures thereof, with a second amount of a compound of the formula $R^2C_6H_4SO_2NHSO_2R_f$ where R_f is a C_1-C_8 perfluoroalkyl, where R^2 is selected from the group consisting of –NaO, -LiO, -KO, NH or mixtures thereof, at a first temperature of about 60 °C to about 200 °C to produce a reaction product,

reacting the reaction product with R^3R^2 at a second temperature of 60 °C to about 200 °C at a pressure of about 3.5-4 bar.

47(withdrawn). A haloalkoxy sulfonimide functionalized polyphosphazene of the formula $(NP(OCH_2(CF_2)_4H)_2)_X$ $(NP(OCH_2(CF_2)_4H)OC_6H_4SO_2NR^1SO_2R_f)_{(1-x)}$ where R^1 is selected from the group consisting of Na, Li, H, and K, and where R_f is a C_1-C_8 perfluoroalkyl.

48(withdrawn). The haloalkoxy sulfonimide functionalized polyphosphazene of claim 47 where R^1 is Na.

49(withdrawn). A method of manufacture of haloalkoxy sulfonimide functionalized polyphosphazene of the formula $[NP(OCH_2(CF_2)_4H)_X (OC_6H_4SO_2N R^1SO_2R_f)_{2-x}]_n$ where R^1 is selected from the group consisting of Na, Li and K and , R_f is a C_1-C_8 perfluoroalkyl, comprising,

reacting $(NPCl_2)_n$, where $n \geq 3$ with an alkali fluoroalkoxide selected from the group consisting of $NaOCH_2(CF_2)_4H$, $NaOCH_2CF_3$, $NaOCH_2CF_2OCF_2CF_2OCF_3$ $LiOCH_2(CF_2)_4H$, $LiOCH_2CF_3$, $LiOCH_2CF_2OCF_2CF_2OCF_3$, $KOCH_2(CF_2)_4H$, $KOCH_2CF_3$, and $KOCH_2CF_2OCF_2CF_2OCF_3$ to displace about 50% of the Cl in the $(PNCl_2)_n$, where $n \geq 3$ to form a first reaction product,

reacting the first reaction product with an alkali phenoxy sulfonmide of the formula $R^1OC_6H_4SO_2NMSO_2R_f$ where R^1 is selected from the group consisting of Na, Li and K to produce a second reaction product,

reacting the second reaction product with an excess of an alkali fluoroalkoxide selected from the group consisting of $NaOCH_2(CF_2)_4H$, $NaOCH_2CF_3$, $NaOCH_2CF_2OCF_2CF_2OCF_3$, $LiOCH_2(CF_2)_4H$, $LiOCH_2CF_3$, $LiOCH_2CF_2OCF_2CF_2OCF_3$, $KOCH_2(CF_2)_4H$, $KOCH_2CF_3$, and $KOCH_2CF_2OCF_2CF_2OCF_3$ to produce a haloalkoxy sulfonimide functionalized polyphosphazene of the formula $[NP(OCH_2(CF_2)_4H)_2)_x (OC_6H_4SO_2NR^1SO_2R_f)_{2-x}]_n$ where R^1 is selected from the group consisting of Na, Li and K and R_f is a C_1-C_8 Perfluoroalkyl,.

50(withdrawn). A blend of sulfonimide functionalized polyphosphazene comprising a sulfonimide funtionalized polyphosphazene and another polymer selected from the group consisting polytetrafluoroethylene (PTFE), polyvinylidene fluoride (PDVF), polyvinylidene fluoride-co-hexafluoropropylene (PVDF-HFP), polystyrene (PS), polybutadiene (BR), polyvinylidene chloride (VDC), polymethyl methacrylate (PMMA), polyvinyl alcohol (PVAL), polyvinyl acetate (PVA), polyphenylene oxide

(PPO), polyether ether ketone (PEEK), polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polycarbonate (PC), polyether sulfone, polybenzimidazoles (PBI), polydimethyl siloxane, polyphenylene sulfide (PS), polypyrrole, polyphenylene, polyaniline, poly(bis(pentoxy)phosphazene), poly(bis(phenoxy)phosphazene), poly((methoxyethoxyethoxy)(m-methyl phenoxy)phosphazene), styrene-acrylonitrile copolymers (SAN), Acrylonitrile-butadiene-styrene terpolymers (ABS) and ethylene-methacrylic acid copolymer.

51(withdrawn). A blend of claim 49 where the another polymer is polyvinylidene fluoride.

52(withdrawn). A composition comprising a sulfonmide functionalized polyphosphazene polymer and an additive selected from the group consisting of examples such as additives such as carbon black, graphite, platinum, rhuthenium, silica, montmorillonite, clay, titanium dioxide, zirconium oxide, phosphoric acid, phosphotungstic acid, silicomolybdic acid, phosphomolybdic acid, salts such as $CF_3SO_2NLiSO_2CF_3$, hexaphenoxycyclotriphosphazene, di(m-methylphenoxy)tetra(trifluoroethoxy)cyclotriphosphazene, plasticizers such as methanol, ethanol and hexane, cross-linkers such as diamines.

53(withdrawn). A membrane comprising a sulfonimide functionalized polyphosphazene of the formula $[NP(OC_6H_4SO_2NR^1SO_2R_f)_x(OC_6H_4CH_3)_{2-x}]_n$, where R^1 is Li, Na, K, or H and R_f is a C_1-C_n perfluoroalkyl.

54(withdrawn). A membrane comprising a sulfonmide functionalized polyphosphazene of the formula $[NP(ZR^2)_x(ZC_6H_4SO_2NR^1SO_2R_3)_{2-x}]_n$, where R^1 is Li, Na, K, or H, Z is O or NH, and R^2 is an alkyl, aryl, fluorinated alky, perfluorinated alkyl, fluorinated aryl, functionalized alkyl or functionalized aryl and R_f is a C_1-C_n perfluoroalkyl.

55(withdrawn). The membrane of claim 52 wherein the polyphosphazene is cross linked.

56(withdrawn). The membrane of claim 53 wherein the polyphosphazene is cross linked.

57(withdrawn). The membrane of claim 54 wherein the polyphosphazene is cross linked.

58(withdrawn). A fuel cell comprising a membrane of a polyphosphazene of the formula $[NP(ZR^2)_x(ZC_6H_4SO_2NR^1SO_2R_f)_{2-x}]_n$, where R^1 is Li, Na, K, or H, Z is O or NH, and R^2 is an alkyl, aryl, fluorinated alkyl, perfluorinated alkyl, fluorinated aryl, functionalized alkyl or functionalized aryl, R_f is a C_1-C_8 perfluoroalkyl, and where the polyphosphazene is cross linked or uncross-linked.

59(withdrawn). A fuel cell comprising a membrane of a polyphosphazene of the formula $[NP(OC_6H_4SO_2NR^1SO_2R_f)_x(OC_6H_4CH_3)_{2-x}]_n$, where R_f is a C_1-C_8 perfluoroalkyl, where the polyphosphazene is cross linked.

60(withdrawn). A method of making a lithiated phenoxy sulfonimide functionalized polyphosphazene $[NP(OR^5)_x(OC_6H_4SO_2NLiSO_2R_f)_{2-x}]_n$ where R_f is a C_1-C_8 perfluoroalkyl and where R^5 is an oligo-oxy substituent selected from the group consisting of $-CH_2CH_2OCH_2CH_2OCH_3$, $-CH_2CF_2OCF_2CF_2OCF_3$, $-CH_2CH_2OCH_2CH_2OCH_2CH_2OCH_3$ comprising,

forming an aqueous, acidic solution of $[NP(OR^5)_x(OC_6H_4SO_2NHSO_2R_f)_{2-x}]_n$ and subjecting the solution to dialysis against a LiCl solution.

61(withdrawn). The method of making the copolymer in claim 60 where R^5 is $-OCH_2CH_2OCH_2CH_2OCH_3$ and the polyphosphazene has the formula

$[NP(OCH_2CH_2OCH_2CH_2OCH_3)_x(OC_6H_4SO_2NLiSO_2R_f)_{2-x}]_n$ where R_f is a C_1-C_8 perfluoroalkyl.